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## “A study on strategic supply chain management for freight forwarders: Enhancing customer experience through a digital platform.”

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### 1.INTRODUCTION:

In recent decades the fields of logistics and supply chain management grew both in popularity. and complexity. When people think about supply chain management, theories or strategies, most of the answers will come as from the manufacturing and distribution aspects, and the apparent example case studies will typically involve large organizations that provide effective supply chain such as Toyota, Dell, Zara, Walmart. Supply chain management is broader than that. There are various types of logistics service providers. In this research, freight forwarders will be focused. Not many people know this term, what type of services provided, and how it involves in the area of businesses. In short, freight forwarders are acting as an intermediary of exporters and importers to streamline shipping operation. Murray (2018) states that freight forwarders are specialists in shipping large amounts of products to distant countries and cities and make sure customer receive their items promptly without incident. A freight forwarder can help provide services such as packaging, labeling and documentation to both exporters and importers.

It is universally accepted that customer experience is the heart of any businesses. Like-wise, for freight forwarding industry, they provide service, not product. Hence the service quality is the most critical to providing effective customer experience. It is worthy to note that people remember the experience they receive. Every point of customer experience, their impression through services provided by companies influences customer's loyalty.

Freight forwarders need to embrace the technology to meet and overcome the threats the traditional freight forwarders faced. Back to 30 years ago, they probably focused on the freight service otherwise rely on outsourcing, then 20 years later, freight forwarders added the value of their business by expanding their businesses as one-stop service by merger and acquisitions involved other companies and service providers. Consequently, physical work from 20 years ago continues to be used nowadays. Therefore, to be a modern one-stop shop, they attempt to concentrate on developing innovation and artificial intelligence (AI) to serve customers. Digital freight online has become widespread in the last few years with the purpose to reduce the pain points of both services providers and the customers. According to Vetches (2019), the pain points include delays in quotation request, a lack of transparency on prices, paperwork, phone calls and email back and forth.

### **COMPANY INFORMATION:-**

**BVC Brinks** Diamond and Jewelry Services LLP is a joint venture between **BVC** Group and **Brinks** Global to provide optimum secure logistics solutions in the high-value goods sector, from India to over 130 countries.

BVC Brinks Diamond and Jewellery Services LLP is a joint venture between BVC Group and Brinks Global to provide optimum secure logistics solutions in the high-value goods sector, from India to over 130 countries. BVC Group brings with it a legacy of 60 years and therefore, expertise in the Indian logistics industry. Brinks Global has always been known for its vast coverage across the globe. Specialized knowledge and experience along with a strong network, have been leveraged to provide ideal services and value-added, cost-saving solutions to clients. As an industry leader in risk management and secure logistics, Brinks Global has safeguarded valuables since 1859. With 200 years of experience, Brinks Global offers the utmost quality of service and sets the market standard.

BVC Group has been a market leader in the Indian secure logistics industry and is known for a strong domestic presence. With a committed focus on security and safety, BVC Group specifically services the Diamond and Jewellery industry.

BVC Brinks Diamond and Jewellery Services LLP came into existence in the year 2013. The intention was to connect Indian merchants with the rest of the world; with an ease that would help the Diamond and Jewellery merchants broaden their horizons, literally. BVC Brinks Diamond and Jewellery Services LLP has teams of experts who work around the clock to offer services of international freight forwarding, customs clearance, vaulting of valuable goods, and global exhibitions. The skilled personnel are on hand to guide clients through every step of each process and offer advice on best industry practices for a seamless end-to-end process.

As a market leader, BVC Brinks Diamond and Jewellery Services LLP, has set benchmarks for the industry and has been continuously providing innovative solutions to enhance the client experience and meet all expectations. BVC Brinks Diamond and Jewellery Services LLP has a portfolio of clients that includes market leaders in the high-value goods industry, thus creating the preferred logistics service provider of the industry. Together, BVC Brinks Diamond and Jewellery Services LLP and Brinks Global offer the highest level of secure logistics solutions. With a combined workforce of over 70,000 people worldwide, BVC Brinks Diamond and Jewellery Services LLP offers services to over 130 countries.

## 2. Literature Review

**Christopher Tang 2000** have done a study on **The Value of Information Sharing in a Two-Level Supply Chain.**

Many companies have embarked on initiatives that enable more demand information sharing between retailers and their upstream suppliers. While the literature on such initiatives in the business press is proliferating, it is not clear how one can quantify the benefits of these initiatives and how one can identify the drivers of the magnitudes of these benefits. Using analytical models, this paper aims at addressing these questions for a simple two-level supply chain with nonstationary end demands. Our analysis suggests that the value of demand information sharing can be quite high, especially when demands are significantly correlated over time.

The paper addresses an identified gap in the literature for selecting risk management strategies in global supply chains. It employs grounded theory, a methodology appropriate for theory-building, to explore a phenomenon with an inadequate theoretical base.

**Sunil Agrawal 2009** has done a study on **Impact of information sharing and lead time on bullwhip effect and on-hand inventory.** This work analyzes a two echelon (warehouse–retailer) serial supply chain to study the impact of information sharing (IS) and lead time on bullwhip effect and on-hand inventory. The customer demand at the retailer is assumed to be an autoregressive (AR(1)) process. Both the echelons use a minimum mean squared error (MMSE) model for forecasting lead time demand (LTD), and follow an adaptive base-stock inventory policy to determine their respective order quantities. For the cases of without IS and inter as well as intra echelon IS, expressions for the bullwhip effect and on-hand inventory for the warehouse are obtained, considering deterministic lead-time. The results are compared with the previous research work and an easy analysis of the various bullwhip effect expressions under different scenarios, is done to understand the impact of IS on the bullwhip effect phenomenon. It is shown that some part of bullwhip effect will always remain even after sharing both inter as well as intra echelon information. Further, with the help of a numerical example it is shown that the lead time reduction is more beneficial in comparison to the sharing of information in terms of reduction in the bullwhip effect phenomenon.

**IBM group 2010** have done a study on **The smarter supply chain of the future:**

For this Global Chief Supply Chain Officer Study, IBM group leaders interviewed 400 senior executives from North America, Western Europe, and the Asia Pacific region who are responsible for their organizations' supply-chain strategies and operations.

Findings in five key areas summarize the state of supply-chain management today: cost containment; visibility, risk; customer intimacy; and globalization.

IBM sees a different kind of supply chain emerging – a smarter supply chain with three core characteristics: Instrumented – supply-chain data previously created by people will increasingly be generated by sensors, RFID tags, meters, actuators, GPSs, and other devices and systems; Interconnected – smarter supply chains would take advantage of unprecedented levels of interaction that will facilitate collaboration on a massive scale; and Intelligent – to assist executives in evaluating trade-offs, intelligent systems will assess myriad constraints and alternatives, allowing decision makers to simulate various courses of action.

Smarter supply chains would have the analytic capability to evaluate myriad alternatives in terms of supply, manufacturing, and distribution – and the flexibility to reconfigure flows as conditions change. Executives could then plan for contingencies and execute them.

**Barbara B. Flynn 2010** have done a study on **The impact of supply chain integration on performance: A contingency and configuration approach**

This study extends the developing body of literature on supply chain integration (SCI), which is the degree to which a manufacturer strategically collaborates with its supply chain partners and collaboratively manages intra- and inter-organizational processes, in order to achieve effective and efficient flows of products and services, information, money and decisions, to provide maximum value to the customer. The previous research is inconsistent in its findings about the relationship between SCI and performance. We attribute this inconsistency to incomplete definitions of SCI, in particular, the tendency to focus on customer and supplier integration only, excluding the important central link of internal integration. We study the relationship between three dimensions of SCI, operational and business performance, from both a contingency and a configuration perspective. In applying the contingency approach, hierarchical regression was used to determine the impact of individual SCI dimensions (customer, supplier and internal integration) and their interactions on performance. In the configuration approach, cluster analysis was used to develop patterns of SCI, which were analyzed in terms of SCI strength and balance. Analysis of variance was used to examine the relationship between SCI pattern and performance. The findings of both the contingency and configuration approach indicated that SCI was related to both operational and business performance. Furthermore, the results indicated that internal and customer integration were more strongly related to improving performance than supplier integration.

## **McKinsey & Company, Nielsen 2012** have done a study on **Six steps to successful supply chain collaboration**

Supply chain collaboration is a hot topic today—and no wonder: companies that collaborate effectively across the supply chain have enjoyed dramatic reductions in inventories and costs, together with improvements in speed, service levels, and customer satisfaction. Collaboration between companies—joint initiatives that go beyond their normal course of day-to-day business, with the aim of delivering significant improvement over the long term—is particularly attractive for the consumer packaged goods (CPG) sector. With pricing under pressure from recession-scarred consumers, the temptation for retailers is to transfer the pain upstream to their suppliers by passing on price reductions and forcing them to bear an increasing share of costs. On the supply side, however, there is less and less room for manufacturers to absorb additional costs as volatile input prices put the squeeze on margins and the marketing investment required to differentiate branded products from private-label competitors continues to rise. CPG players are looking at collaboration initiatives as a way out of the damaging spiral of antagonistic relationships. That's one reason why collaboration efforts between manufacturers and their retailer customers have dramatically grown in popularity in recent years. That was clearly evidenced in the 2008 annual Customer and Channel Management (CCM) Survey, conducted by McKinsey & Company, Nielsen, and the Grocery Manufacturers Association,<sup>1</sup> when chief executive officers in the CPG industry identified collaboration with partners as their highest strategic priority. In the 2010 edition of the same survey<sup>2</sup>, more than 80 percent of the companies surveyed said they were involved in at least one collaboration initiative, and some were involved in as many as 10 such arrangements. Supply chain collaboration has delivered some real value for participants, but overall, these initiatives are more likely to fail than to succeed. Indeed, participants in the 2010 CCM survey said that only two in 10 of their collaboration efforts delivered significant results. The remaining 80 percent represent more than just lost opportunities to add value. If companies can't make collaborations work, they will not only fail to achieve the potential benefits that supply chain collaboration can provide, but they will also risk destroying the enthusiasm for further attempts, both inside their own organizations and with their trading partners.

## **U.S. manufacturing firms 2011** have done a study on **Supply chain collaboration: Impact on collaborative advantage and firm performance.**

Facing uncertain environments, firms have strived to achieve greater supply chain collaboration to leverage the resources and knowledge of their suppliers and customers. The objective of the study is to uncover the nature of supply chain collaboration and explore its impact on firm performance based on a paradigm of collaborative advantage. Reliable and valid instruments of these constructs were developed through rigorous empirical analysis. Data were collected through a Web survey of U.S. manufacturing firms in various industries. The statistical methods used include confirmatory factor analysis and structural equation modeling (i.e., LISREL). The results indicate that supply chain collaboration improves collaborative advantage and indeed has a bottom-line influence on firm performance, and collaborative advantage is an intermediate variable that enables supply chain partners to achieve synergies and create superior performance. A further analysis of the moderation

effect of firm size reveals that collaborative advantage completely mediates the relationship between supply chain collaboration and firm performance for small firms while it partially mediates the relationship for medium and large firms.

### **Sanders 2012** done a study on “Customer Service in the Supply Chain”.

Today’s business nature is characterized by an empowering of the customer who is the driving force of the supply chain. Focusing on customers and supply chain competitive-ness has been expanded with the turn of the century. To be competitive, companies must be better than competitors at meeting customer needs. In order to understand the all function involved customer’s perspective, some foundation of marketing needs to study. Stepwise, the context of customer experience, what is customer service and how it impacts in the supply chain, then the focus on the logistics customer service and roles of it in freight forwarders will be provided .Sanders (2012: 93) has pointed out the definition and importance of the marketing in short as it is the function responsible for identifying what customer needs, how to create value and importantly how to build strong customer relationships. In addition, it became a far more complex than it may appear due to much more than basic needs for products and services of customers. The marketing key is to understand and develop the combination of products and services that accurately meet the different expectations of customers.



FIGURE 2.1

### **Grant 2012** done a study on “Logistics Customer Service”.

Customer service is not only a crucial factor in shaping today's marketplace but also a requirement in logistics activities. The concept of customer service of freight forwarders is more like service than goods. As freight forwarders, customer service will be the first line of contact with customers. The customers should not feel like they are trapped when contacting the companies (Global forwarding 2013). Therefore, there should be customer services or customer cares who know the value of customers and willing to serve them professionally anytime. Grant (2012: 18) suggested that logistics customer service con-trains three distinct categories: pre-transaction, transaction and post-transaction. The post-transaction also includes the relationship of service and

the relationship of quality. His three construct and the primary descriptors of global satisfaction is shown in Figure 5 below.

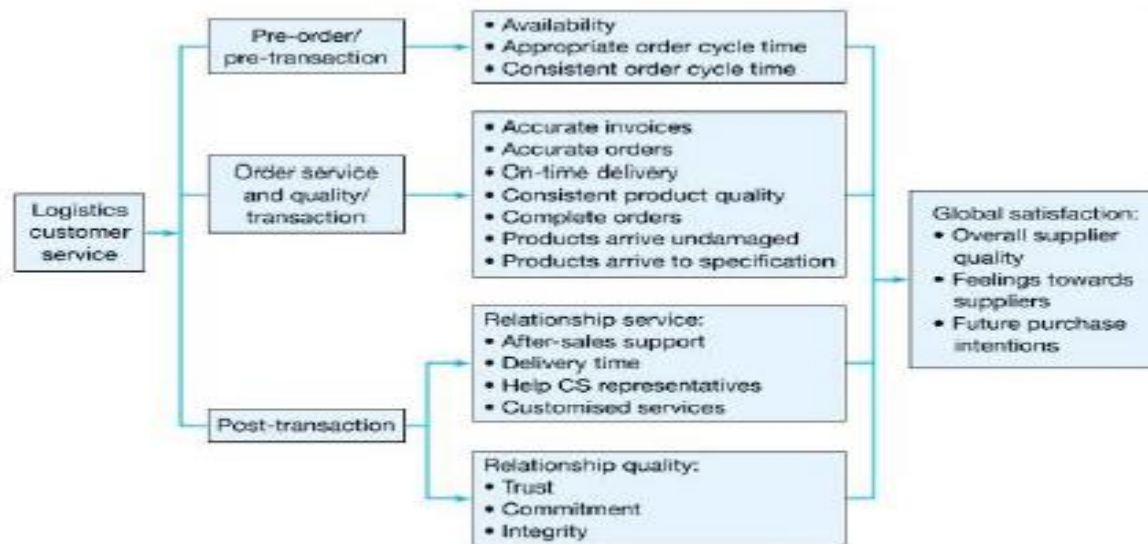


Figure 5. Logistics customer service elements (Grant 2012: 18)

## FIGURE 2.2

According to Grant (2012: 18-20), pre-order or pre-transaction is an element before the actual order takes place. To always fulfil customer needs, availability of products in existing inventory, appropriate and consistent order cycle time or lead time is the essential indicators. This element is a must for all suppliers to provide to the firm. Secondly, order service and quality or transaction, this element occurs during the stage of order fulfilment as involved transaction activities. The indicators for this element include accurate invoice and order, on-time delivery, consistent product quality, complete order and product arrive at the specification with an undamaged condition. Lastly, the post-transaction element occurs when the transaction is finished and related between suppliers and clients. The two categories include service and quality. Relationship service contains after-sales support that is provided by suppliers, actual time delivery, helpful customer service representative and customizing services. Relationship quality is the relationship between the parties which exhibits as trust, commitment and integrity. These three constructs link to the outcome as global satisfaction.

## Irina V. Kolesnikov 2015 has done a study on **The Role of Marketing Channels in Supply Chain Management**

### Highlights

- The article reviews and summarizes the most impactful marketing literature on SCM.
- A set of provided takeaways aids the development of SCM research in marketing.
- Research integration across SCM functions enables value-driven and cost-focused SCM.

This paper synthesizes five decades of supply chain-related research from premier managerially oriented marketing journals and provides a state-of-the-art integration and forecasting of where the field is heading.

Such a review identifies where the field of supply chain management (SCM) has been, where it is, and where it is likely to go within the domain of marketing. Importantly, our paper involves a strategic discovery of the anchoring of SCM thought in marketing. A prominent feature of this paper is a set of takeaways, delineated from the cross-section of SCM literature bases (marketing channels, logistics, purchasing, and operations management) that will facilitate the development of the topic of SCM in marketing. These takeaways serve as agenda setters for future research and potential applications of SCM in marketing. Overall, we contribute to the marketing and SCM literatures by (1) reviewing the breadth of the most impactful literature on SCM that is directly connected to the field of marketing, (2) summarizing the state-of-the-art of the SCM in marketing literature, and (3) forecasting via a series of integrated takeaways what research is needed and where the SCM in marketing is likely to progress.

**Mangan and Lalwani (2016: 11-13)** done a study on “**SCM is the design and management of all activities within a network of the supply chain in both relationships and flows of material, information and resources**”. In order to create value, enhance efficiency and meet customers satisfaction. They also distinguish four perspectives on logistics versus SCM which is an important feature to be noted. The four aspects as shown in Figure 2 include traditionalist, re-labelling, inter sectionist and unionist view. Traditionalist regards SCM as the subset of logistics, secondly re-labelling view where logistic is seen worth noting as re-labelled by the world SCM. The inter sectionist view is that some parts between logistics and SCM are overlapped, but some are separate. Finally, the unionist view; the concept that widely accepted and adopted in various textbooks, this view the logistics is seen as a part of SCM and SCM is a much broader, intercompany, boundary-spanning concept than logistics concept. Figure 1 below illustrates four different perspectives on logistics versus supply chain management.

**Mangan & Lalwani 2016** done a study on “**The definition and role of Freight Forwarders**”

There are many logistics terms that people easy to get confused. Likewise, “Freight for-warder” is one on the list. This term is not new. However, many people do not comprehend this type of business sufficiently due to its vague definition and activities overlapping with other terms. If the readers are looking for the definition of freight forwarding, they might find out some a little wordy and complicated explanation. To illustrate the definition of it, Mangan and Lalwani explain the role of freight forwarders in their book as “high-street travel agents, but they arrange transportation, not people” (2016: 132). They further state that a significant activity involves arranging customs clearance for freight that moves internationally. Sometimes freight forwarders are called brokers or freight agents (Mangan & Lalwani 2016: 132-133).

**Mangan and Lalwani 2016** done a study on “**Technology in the supply chain**”

One of the most distinctive factors that affect the SCM is the massive change of capability and availability of information technology. Traditionally, most of the businesses the inter-action has been manual, importantly rely on the team’s experiences, using hard copy hardcopy document, the phone and email, but now IT has



changed the way business interaction B2B and B2C. As mentioned in the previous section, since from the 1990s; the era of computerization and internet of things, the rapid accessibility of information for all parties in the supply chain was changed. The economical but more efficient methods of conducting the business are the result of advanced technology. In this section, technology applications implemented in freight forwarding, as well as the context of digital freight forwarding to enhance customers experiences will be provided.

Mangan and Lalwani (2016: 208) point out two board areas of technology applications in logistics and SCM as hardware and software applications example of hardware application include the automated materials handling equipment. Software applications such as enterprise resource planning (ERP) software that allows a business to track customer and business interactions. To discuss a little more in detail, IoT (Internet of things) refers to the network of devices embedded with electronics, sensors and software to enable the connection. Automation such as material handling, security detection and drones. Data capture and transfer technologies such as EDI (electronic data interchange) and RFID (radio frequency identification). These mentioned technologies are pervasively implemented in the industry.

What is about technology in freight forwarder? - It is no doubt, that technology is indeed impacting on the freight forwarding market. There are numerous companies already implemented technologies to add their value and to good use, especially offering more straight forward, quickly and online. The author will point out the importance and benefit of the rising trend “Digital Freight Forwarding” in the next section.

**Rodrigue (2017)** done a study on **“The evolution of SCM can be divided into five stages: 1960s, 1980s, 1990s, 2000s and 2010s afterwards”** According to Rodrigue’s explanation in his article that the rise of SCM as it has been characterized by an increasing degree of integration of separate function. In the 1960s, all the functions being reasonably independent of the other. Then during the 1970s and 1980s, in the era, the emergence of personal computers provided massively better computer access to planners. The activities are consolidated into two functions include material management and physical distribution. The subset of materials handling included demand forecasting, sourcing, requirement and production planning. The functions as in physical distribution included goods inventory, distribution planning, order processing, transportation and customer service. However, at this time, involved warehouse activities still were separate from others such as warehousing, materials handling and packaging. Move further to the 1990s, and all the functions became integrated as a single management perspective. In the 2000s, due to modern information technology, integration became better complete. SCM allows integration of management and control of information, finance, goods flow, distribution and production system. The objective is to aim at value capture and competitiveness. Stepwise, nowadays, the growth of automation has been a dominant element of SCM, especially, for physical distribution and material management. They push towards automation such as storage, material handling and packaging as well as automated delivery vehicles also implemented. (Rodrigue 2017)

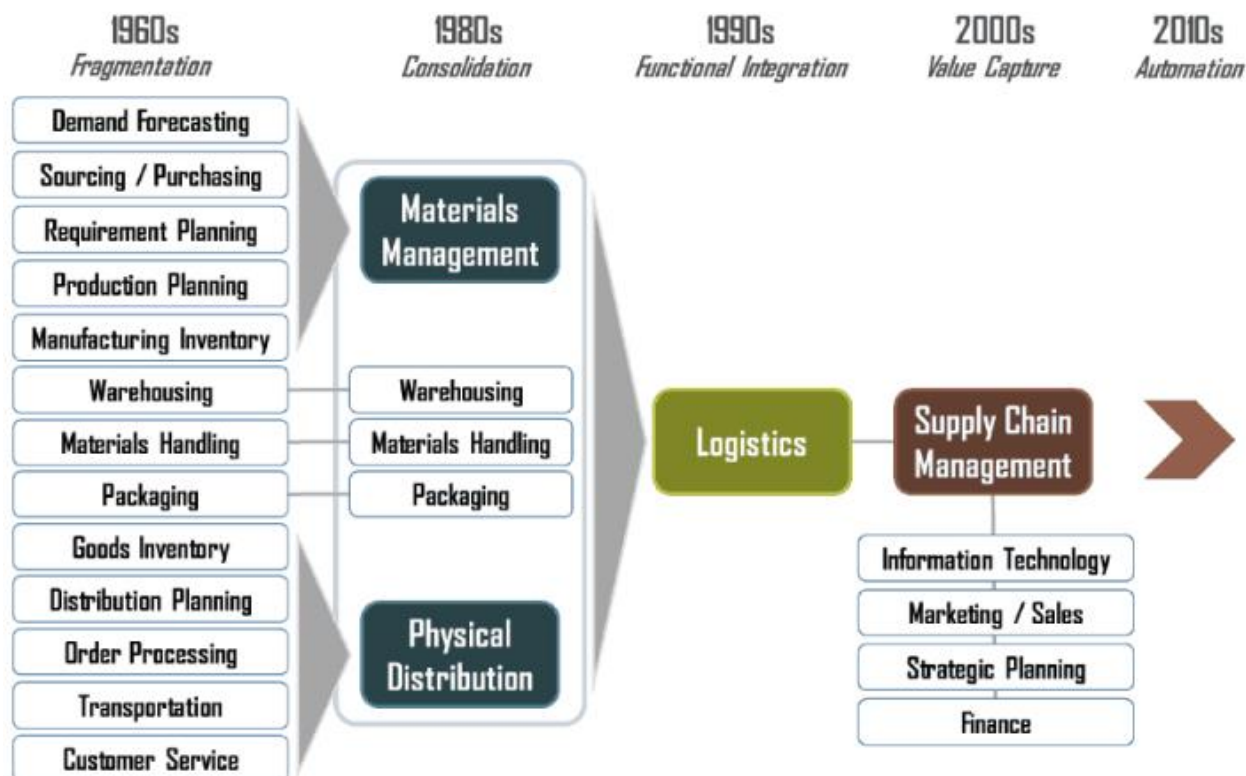


Figure 2.3: The Evolution of Supply Chain Management (Rodrigue 2017).

Many researchers have mentioned the evolution of SCM in their textbooks and websites. The beginning of the history may not start in the same period, some may define it as earlier in the 1940s, and 1950s when logistics was seen as only how to use mechanization (Robinson 2015). Some may only focus from in the 1990s which is the most rapid rise of logistics and SCM as a critical business concept. However, there is one consistent point that logistics and SCM became booming by the emergence of the technology revolution as well as the globalization of manufacturing. The word and interest in logistics and supply chain was widespread recognition in the era of 1980s and 1990. Many SCM strategies and principals invented by leading-edge companies and technology is one of the most critical factors driving effective supply chain management since then.

**Gautam 2017** done a study on “customer experience into eight stages”. The reader might have seen this type of process before because it is the same as the customer journey stage. Many researchers believe that companies should use a customer journey map to define and refine their customer experience. A process below display a customer experience journey stages.

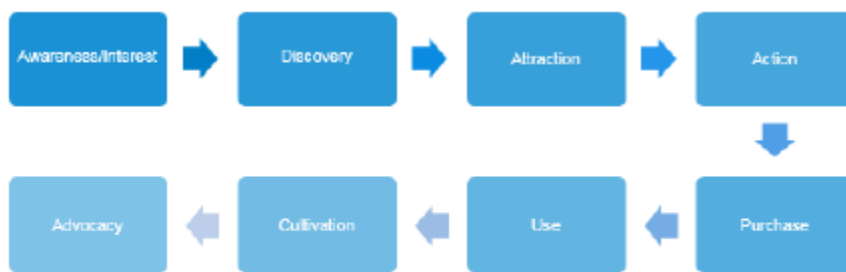


Figure 5. The stages of the customer experience journey (Gautam 2017)

## FIGURE 2.4

It is undeniable that customer service is a vital part of any firms and the entire customer experience. Customer service is the company advise their clients before, during and after purchasing or using products and services. All the problems customers facing is the duty of customer service to tackle those problems. Gautam also points out that it is customer service responsibility to increase customer satisfaction and loyalty by creating everlasting relationships with customers (2017). According to the PowToon, 73% of customer leave because of dissatisfied customer service (2017). No matter how hard companies strive to increase customer experience, it is possible that the company fail to satisfy customers is some issues. Thus, customer service is always needed.

**IRC Group (2017)** done a study on “**freight forwarders who play a significant interlinking in the supply chain**”. The following argument is based on IRC Group (2017) as freight forwarders are considered as a hub of information which is built on a network of cross border colleagues and contract as well as knowledge of the law in various regions along with multicultural difference can help businesses take advantage at this point. Secondly, freight forwarders gather different vertical of supply chain management. Thirdly, a business can rely on freight forwarder to seek advice on complexity issue, for instance, import/export strategies, trader term or any foreign contracts. Fourthly, with an established global network, freight forwarder can provide a more economical price. Finally, all the legal documents, certifications, procedures, as well as expediting the flow of goods are handled by freight forwarder. In short, there are five important roles include global transportation network, integration of operation, consultant service, cost-effective and legal assistance.

**Ulison Rebulb De Oliveira 2017** have done a study on **The ISO 31000 standard in supply chain risk management**

Highlights:

- Ruptures on SC can cause large financial losses and undermine the firms’ reputation.
- Researchers diverge over number and content of the steps related to a SCRM analysis.
- AHP can be useful to prioritize risk assessment tools.
- Results show that ISO 31000 can be used as a standardized method to perform SCRM.
- SCRM is a particular task that is inherent to each organization.

Ruptures and interruptions in supply chains (SC) can cause large financial losses and undermine the reputation of firms. In this respect, there is growing interest among researchers in the theme of supply chain risk management (SCRM). SCRM involves analysis carried out in various steps. However, researchers diverge over the number and content of these steps. In light of this problem, the aim of the present study was to analyze whether it is possible to apply the ISO 31000 standard as a systematic procedure for SCRM. And, if so, how the standard can be implemented in the SCRM context, as a framework in a specific company. Through a systematic literature review, we compared and harmonized the risk management steps proposed by researches about SCRM. Additionally we developed a pathway to identify and prioritize which ISO 31000:2009 risk assessment tools and techniques are supposed to integrate a procedure for SCRM, based on the Analytic Hierarchy Process (AHP), exemplified in an automotive supply chain. Based on the research findings, we infer that ISO 31000 can be used beneficially as a standardized method to perform SCRM, as long as tools and techniques are selected according to the company needs and business characteristics.

**Forwarder Magazine 2017** done a study on “**Digital Freight Forwarding**”.

We are in the era of getting digitalization in any touchpoint of business; however, on a major level, freight forwarding industry still works on paper, documents and files. The forwarders have to spend an amount of time on checking document accuracy, calculate their freight charge, generate a quote and find the best rates, routes and schedule. The activities lead to making the whole process very time-consuming. These are the factors of digital freight forwarding invention. At this point, the readers might wonder the concept of digital freight forwarder. Its concept is simple as it is a new breed of a traditional freight forwarder that simplifies or optimize the freight forwarder's procedure. With the digital platform the burdensome of the mentioned traditional operational process. Also, to respond to customer needs such an online experience and faster service. Digital freight platforms are driving the transformation; various players have entered in this race, some participated in the race early on, some came later, and others still are working on it to enter to the race. A digital freight forwarder is designed to simplify shipping with the customer at the helm. According to Forwarder Magazine (2017), the platform offers customer one place to book, manage and monitor shipments online through clicking a button. It is easy as booking airlines or hotel. Each company might offer customers differently several services, but a distinctive feature they all have is instant quotes and online booking because that is the fundamental reason for the platform invention. Digital freight is the newest technological tool which does not only benefit customers but also the shippers and carriers to reduce their operating costs, make the process efficient and straightforward (Freight Bro, 2018). The world's largest forwarding companies setting up their own digital freight platform such as Maersk- innovation with Twill, Agility with Ship Freight platform, DHL with Saladool, DB Schenker with Drive4Schenker Simultaneously, innovative start-ups such as Zencargo, Fleet, Freight, Freight Hub and Xeneta create massive media buzz (Baron et al., 2017: 5).

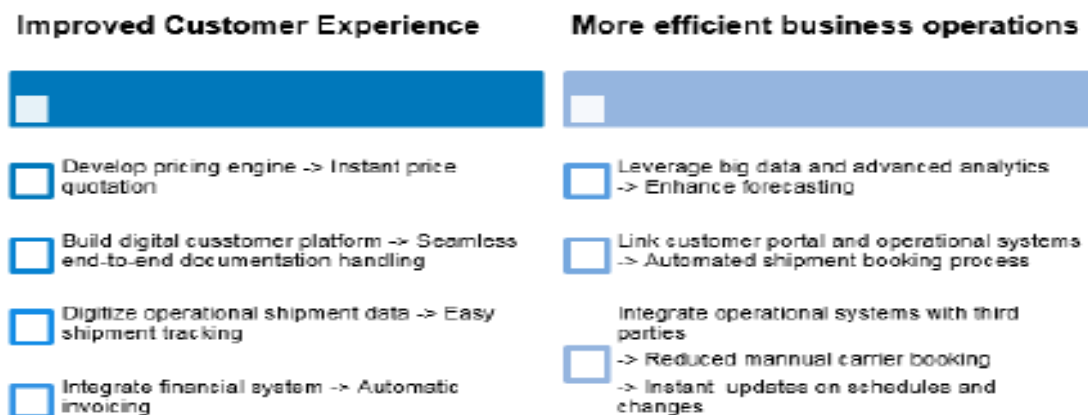


Figure 7. Opportunities to improve both customer experience and operations (Riedl et al. 2018).

FIGURE 2.5

**Council of Supply Chain Management Professionals (2018)** done a study on “**Importance of SCM and blocks of supply chain strategy**”.

It is well known that today SCM is a core of the success of most businesses, thanks to the evolution of its. Thus, it is essential to understand how it plays a crucial role. Recall that SCM involves the coordination and management of all activities in the supply chain. Sanders defines SCM activities into three functions include coordination, information sharing and collaboration (2012: 6). The CSCMP or Council of Supply Chain Management Professionals (2018) emphasizes that implementing effective supply chain management is significant for any businesses due to three main reasons. Firstly, it boosts customer service, as customers always expect the exact product to be delivered quickly and on time at the right location. Secondly, SCM allows a business to reduce its operating costs such as purchasing cost, production costs and total supply chain costs. Finally, SCM helps improvement financial positions, for instance, increases profit lever-age, reduces fixed assets and grows a cash flow. Owing to the controlling and reduction of supply chain costs can result in dramatic increases in firm profits.

**Armstrong & Associates 2018** done a study on “**Top Global Freight Forwarders**”

Even though they might have similar business models, the diversity in levels of profitability between companies is remarkable. The table below presents the top 10 freight for-warding companies as compiled by the consultancy Armstrong & Associates and rec-order by individual company’s gross revenue, freight volumes which in both ocean TEUs and metric air tons as well as an estimation of A&A (Armstrong & Associates 2018). According to Burs on (2018), DHL Supply Chain & Global Forwarding and Kuehne + Nagel both ranked in a first place and followed by DB Schenker, another well-known German logistics service provider. Compared with the previous year, Richard Armstrong the chairman of Armstrong & Associates says: “Some had impressive revenue numbers while others captured their rankings by cargo volumes. It’s a complicated process, but it’s balanced and fair” (Armstrong cited in Burs on 2018).

Rank	Provider	Headquarters	Gross Revenue (US\$ M)	Ocean TEU's	Air Metric Tons
1	DHL Supply chain % global forwarding	Germany	27,598	3,259,000	2,248,000
1	Kuehne + Nagel	Switzerland	22,574	4,355,000	1,570,000
2	DB Schenker	Germany	18,560	2,169,000	1,300,000
3	Sinotrans	China	9,530	3,360,300	533,300
4	DSV	Denmark	11,374	1,389,611	635,655
5	Expeditors	United States	6,921	1,070,424	985,549
6	Panalpina	Switzerland	5,621	1,520,500	995,900
7	Nippon Express	Japan	16,720	600,000	835,755
8	UPS Supply Chain Solutions	United States	7,981	600,000	935,300
9	Bolloré Logistics	France	5,012	864,000	640,700
10	CEVA Logistics	The Netherlands	6,994	729,000	480,000

Table 1. Top 10 Global Freight Forwarders List (Armstrong & Associates, 2018)

TABLE 2.6

### **Morgan 2018** done a study on “Customer Experience”.

Customer experience is a buzzword in business lately, people know it matters, but they are still confused with customer service. To give a more precise understanding, Blake Morgan, a Forbes contributor defines customer experience as “how the customers feel about the company overall (both pre and post-sale) and offering with the emotional, physical, psychological connection customers have with a brand” (Morgan 2018). If a customer has a positive experience with a product or service company offering, that customer tends to become a repeat and loyal customer. On the other hand, even the company X is renowned for high-quality and robust customer experience, but the customer receives a defective product. Customer’s perception toward the company X will change as a low company quality. It is noteworthy that only one negative reason can lead to an overall poor experience, and definitely, it affects the brand and company image and will become a bigger issue as a customer lose their trust. Customer perception is fragile and easy to be changed, so steadily maintaining customer experience is the top priority.

**Ship Hymen 2018** done a study “enhancing customer experience management can be the essential investment that companies can make in today’s competitive business environment” (Hymen 2018). These days, many companies use effective customer experience strategy to create an optimal customer experience at all touchpoints and to be outstanding among competitions. Customers are navigated through multi-channels of the customer journey to avoid customer’s unsatisfaction. Multi-channels in customers journey include prints, websites, emails, word of mouth, in-person and especially social media.

**Faisal Idris 2018** have done a study on **Digital Supply Chain:**

Suppliers partners companies and dealers in supply chains do use, generate and share information with others. These associations lead to a multitude of challenges and opportunities within the supply chains. A Digital Supply Chain (DSC) is a smart, value-driven, efficient process to generate new forms of revenue and business value for organizations and to leverage new approaches with novel technological and analytical methods DSC is not about whether goods and services are digital or physical, it is about the way how supply chain processes are managed with a wide variety of innovative technologies, e.g. unmanned aerial vehicles, cloud computing, and internet of things, among others. Recent literature highlights the importance of DSC and many industrial researchers discuss its applications. This article reviews the state-of-the-art of existing DSC literature in detail from both academic and industrial points of view. It identifies key limitations and prospects in DSC, summarizes prior research and identifies knowledge gaps by providing advantages, weaknesses and limitations of individual methods The article also aims at providing a development framework as a roadmap for future research and practice.

**Soon Hong Min 2019** have done a study on **Defining Supply Chain Management: In the Past, Present, and Future:**

The article titled “Defining Supply Chain Management” published in 2001 in the Journal of Business Logistics has been cited over 4,900 times in the last 17 years. In this paper, we first provide a historical review of how the article originated and the contributions the article made to both the theory and practice of supply chain management (SCM). Next, we highlight the key market and technological changes that have emerged in SCM followed by how the theory proposed in the 2001 article can still be relevant to support SCM research and practice going forward. We also propose ways of configuring a supply chain and partnering across companies to serve customers in an optimal way. We conclude with a call for research on developing new frameworks to better describe, explain, predict, and shed light on the evolving nature of SCM.

**Jixin Zhao 2020** have done a study on **Smarter supply chain:**

Globalization and growing supply chain interconnectivity have led to greater complexity, uncertainty, and vulnerability in supply chains. Consequently, supply chains must become smarter to confront these challenges. The smarter supply chain has shown great promise; however, the business, policy, and technical challenges must be addressed before changes can be made. A literature review was performed to synthesize the studies on smarter supply chain management. The prior literature has been categorized into four aspect, including information sharing and supply–demand forecasting, smarter supply chain process integration and smarter decision-making, smarter supply chain risk management, and smarter supply chain collaboration. The successful practices and existing solutions for smarter supply chain management are also presented, which could serve as references for enterprises. The review concludes with a discussion of several research topics for further work on smarter supply chain management.

**Zucchini, K., Cher Rafi 2020** have done a study on **Supply chain management 4.0:**

This article presents a review of the existing state-of-the-art literature concerning Supply Chain Management 4.0 (SCM 4.0) and identifies and evaluates the relationship between digital technologies and Supply Chain Management.

A literature review of state-of-the-art publications in the subject field and a bibliometric analysis were conducted.

The paper identifies the impact of novel technologies on the different supply chain processes. Furthermore, the paper develops a roadmap framework for future research and practice.

The proposed work is useful for both academics and practitioners as it outlines the pillar components for every supply chain transformation. It also proposes a range of research questions that can be used as a base to guide the future research direction of the field.

This paper presents a novel and original literature review-based study on SCM4.0 as no comprehensive review is available where bibliometric analysis, motivations, barriers and technologies' impact on different SC processes have been considered.





### 3. RESEARCH OBJECTIVES:

- To find out the experience level of customers about services provide by BVC Brinks.
- To find out the factors that influences the people to use BVC Brinks service.
- To Identify the level of customer experience towards service of BVC Brinks.

### 4. Research Methodology:

#### Problem statement:

“To study the customer experience through digital transformation challenges in the valuable cargo freight forwarders industry.”

#### Objectives of the study :

- To find out the experience level of customers about services provide by Bvc Brinks.
- To find out the factors that influences the people to use Bvc Brinks service.
- To Identify the level of customer experience towards service of Bvc Brinks .

#### RESEARCH DESIGN :

Research Design is broadly classified into three types as

- Exploratory Research Design
- Descriptive Research Design
- Casual Research Design

For this research Descriptive design will be used to carry out the study, because it helps to describe a particular situation prevailing within a company. Careful design of the descriptive studies was necessary to ensure the complete interpretation of the situation and to ensure minimum bias in the collection of data.

## SOURCES OF DATA:

The data is collected through in one way:

- Primary data: - The primary data was collected freshly and thus it was original in character. It has been collected through questionnaire. The questionnaires were given to the respondents when they visited respective branch of BVC Brinks.

## SAMPLING DESIGN:

A Sample Design is a definite plan for obtaining a sample from a given population. It refers the technique or the procedure adopted in selecting items for the sample. The main constitution of the sampling design is as below

1. Sampling Unit
2. Sample Size
3. Sampling Method

### I. SAMPLING UNIT

Customers of BVC Brinks were taken for the survey.

### II. SAMPLE SIZE

Sample size taken for this study is 100 respondents.

### III. SAMPLING PROCEDURE

There are two types of sampling method:

- Probability Sampling Method is a method of Sampling that utilizes some form of random Selection.

## STATASTICAL TOOLS

For this research Non-parametric test was used through Kruskal Wallis and Man-Whitney U Test.

## LIMITATIONS OF STUDY

- The study is purely used for academic purpose.
- The sample size taken for the survey was 100 respondents

## 5.Data Analysis

### 5.1 Frequency for Types of ownership

#### Types of ownership

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid PARTNERSHIP	39	39.0	39.0	39.0
PROPRIETORSHIP	61	61.0	61.0	100.0
Total	100	100.0	100.0	

Table 5.1

Chart for top Business ownership type:

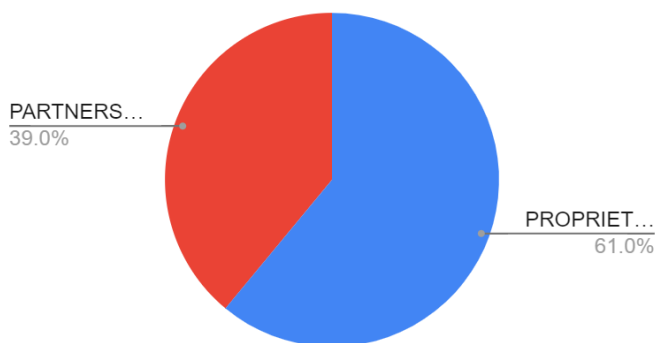


FIGURE 5.1:

Interpretation:

From the above chart it was found that 39% of the respondent were in the partnership Business were in 61% respondent were from proprietorship business.

## 5.2 Frequency for types of Business

**Type of business**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid MANUFACTURER	46	46.0	46.0	46.0
RETAILER	25	25.0	25.0	71.0
WHOLESALE	29	29.0	29.0	100.0
Total	100	100.0	100.0	

TABLE 5.2:

Count of Type of business:

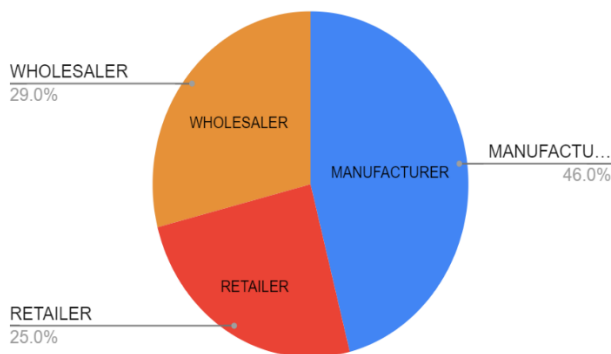


FIGURE 5.2:

Interpretation:

From the above chart it was found that interpret that 29% of the respondent were in the wholesaler Business were in 46% respondent were from manufacturer business and 25% were from retailer business.

5.3 Are you satisfied with how BVC agent handled your inquiry.

### Are you satisfied with how BVC agent handled your inquiry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	21	21.0	21.0	21.0
	2	55	55.0	55.0	76.0
	3	18	18.0	18.0	94.0
	4	2	2.0	2.0	96.0
	5	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

TABLE 5.3:

Histogram of Are you satisfied with how BVC agent handled your inquiry.

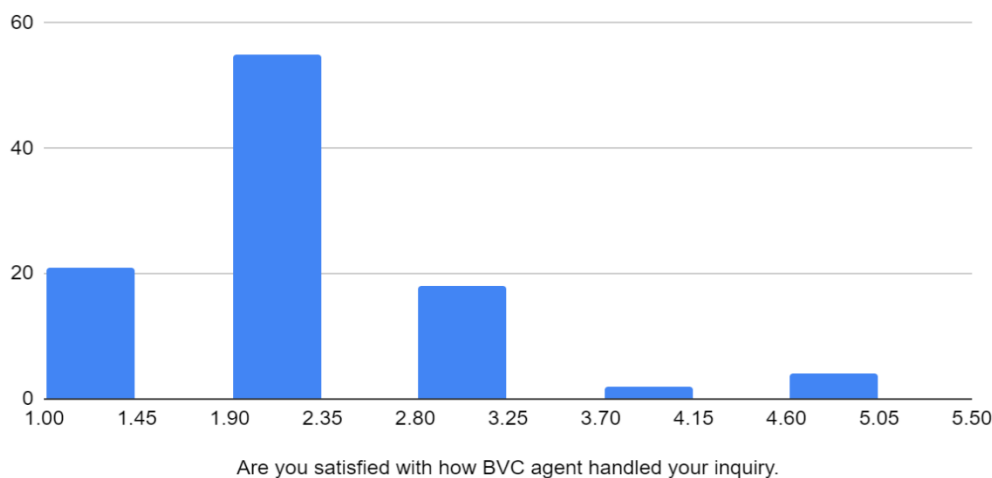


FIGURE 5.3

From the above chart it was found that interpret that 21 respondent strongly agree, 55 respondent agree, 18 respondent are neutral while 2 respondent disagree and 4 respondent strongly disagree.

5.4 Did BVC agent resolve your issue competently.

**Did BVC agent resolve your issue competently**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	34	34.0	34.0	34.0
	2	33	33.0	33.	67.0
	3	27	27.0	27.0	94.0
	4	2	2.0	2.0	96.0
	5	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

TABLE 5.4:

Distribution of Column F

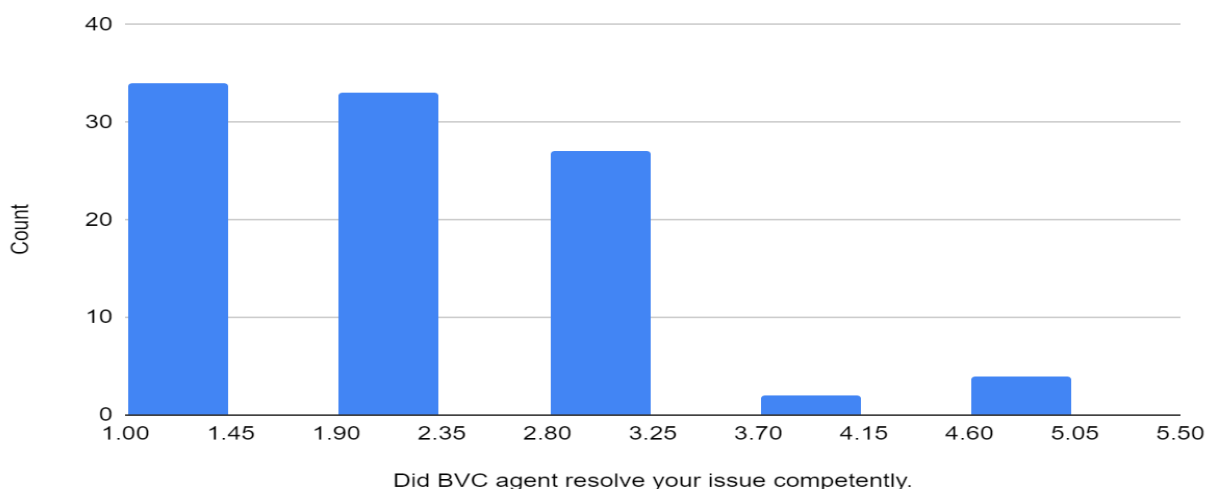


FIGURE 5.4

From the above chart it was found that that 34 respondent strongly agree ,33respondent agree,27 respondent are neutral while 2 respondent disagree and 4 respondent strongly disagree .

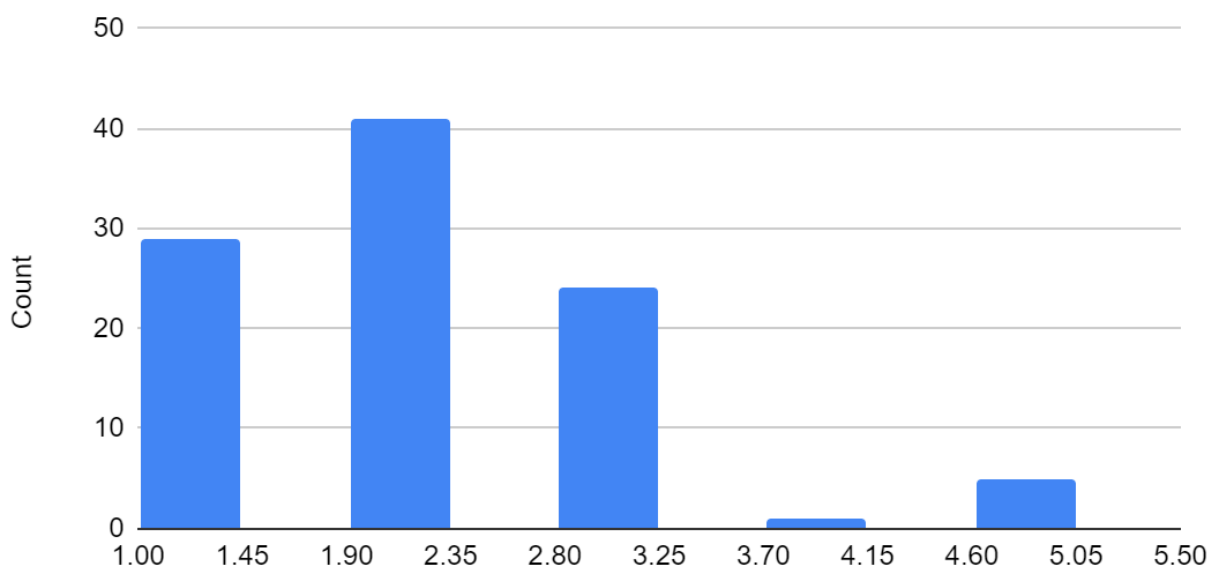
5.5 Were you able to find the support/information you needed easily in BVC BRINKS portals.

### Were you able to find the support information You needed easily

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	29	29.0	29.0	29.0
	2	41	41.0	41.0	70.0
	3	24	24.0	24.0	94.0
	4	1	1.0	1.0	95.0
	5	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

TABLE 5.5:

### Distribution of Column G



Were you able to find the support/information you needed easily in BVC BRINKS p...

FIGURE 5.5

From the above chart it was found that that 29 respondent strongly agree ,41respondent agree,24 respondent are neutral while 1 respondent disagree and 5 respondent strongly disagree .

5.6 Did the BVC Brinks website load efficiently.

**Did the BVC Brinks website load efficiently**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	27.0	27.0	27.0
	2	48	48.0	48.0	75.0
	3	17	17.0	17.0	92.0
	4	4	4.0	4.0	96.0
	5	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

TABLE 5.6:

**Distribution of Column H**

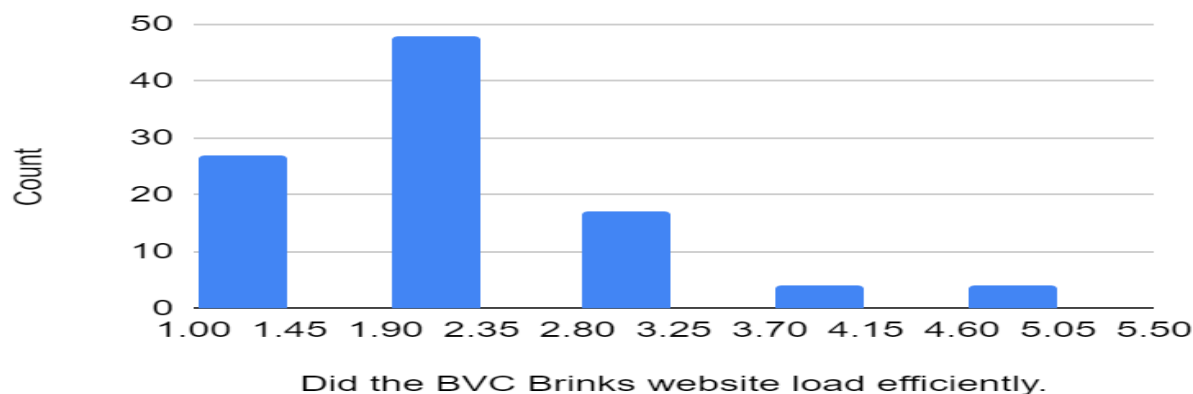


FIGURE 5.6:

From the above chart it was found that 27 respondent strongly agree ,48 respondent agree,17 respondent are neutral while 4 respondent disagree and 4 respondent strongly disagree .



5.7 Were you able to locate products/services/information without assistance on BVC BRINKS portal.

**Were you able to locate products services information without assistance on bvc brinks portal.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	28	28.0	28.3	28.3
	2	43	43.0	43.4	71.7
	3	23	23.0	23.2	94.9
	4	2	2.0	2.0	97.0
	5	3	3.0	3.0	100.0
	Total	99	99.0	100.0	
Missing System	1	1.0			
Total		100	100.0		

TABLE 5.7:

Distribution of Column I

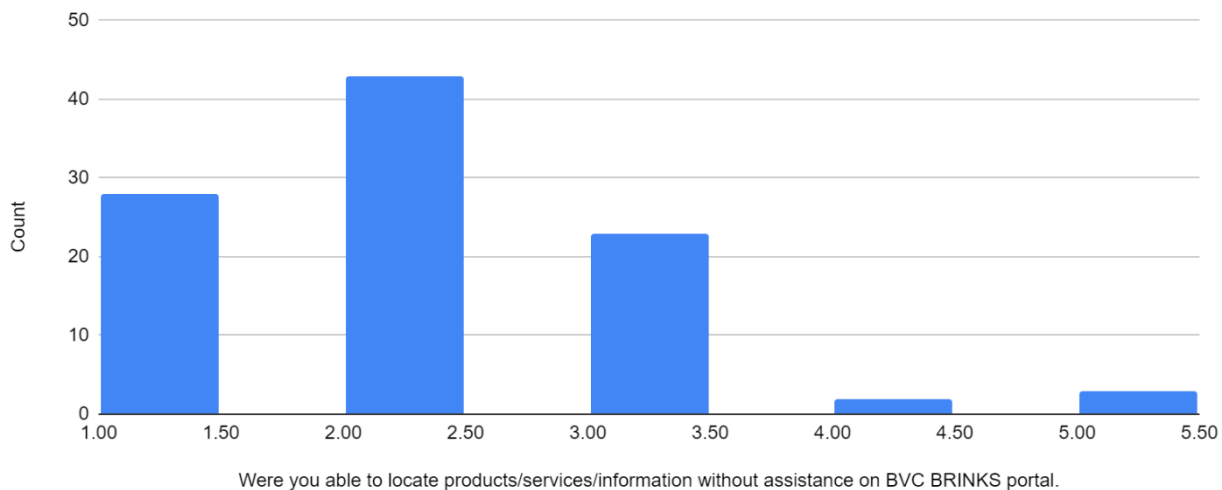


FIGURE 5.7:

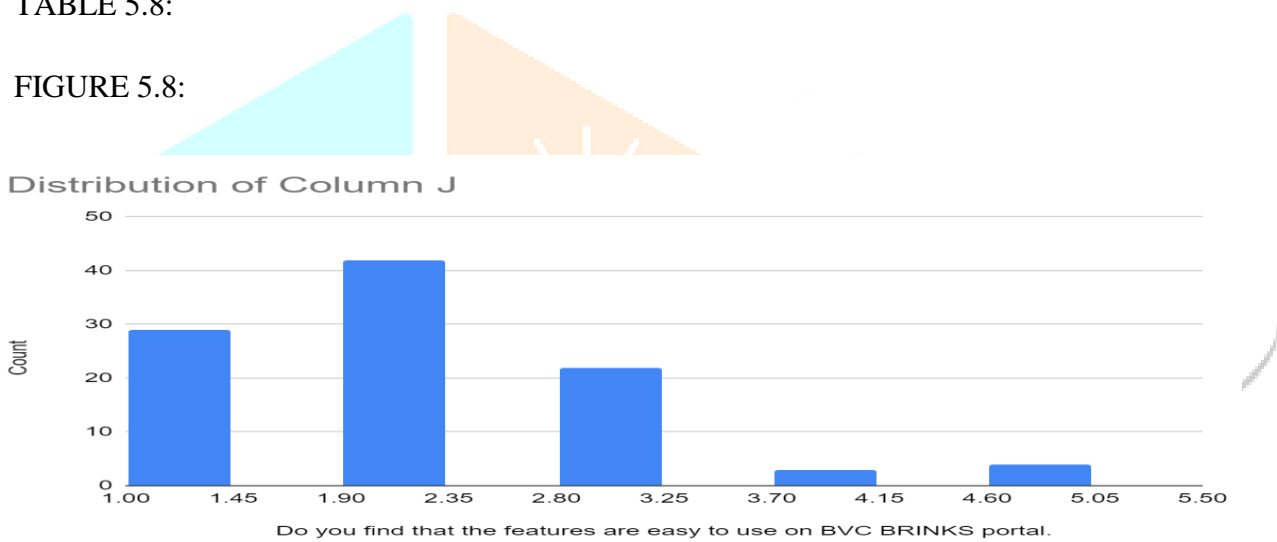
From the above chart it was found that 28 respondent strongly agree ,43 respondent agree,23 respondent are neutral while 2 respondent disagree and 3 respondent strongly disagree .

5.8 Do you find that the features are easy to use on BVC BRINKS portal.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	29	29.0	29.0	29.0
	2	42	42.0	42.0	71.0
	3	22	22.0	22.0	93.0
	4	3	3.0	3.0	96.0
	5	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

TABLE 5.8:

FIGURE 5.8:



From the above chart it was found that 29 respondent strongly agree ,42 respondent agree,22 respondent are neutral while 3 respondent disagree and 4 respondent strongly disagree .

5.9 Are you happy with BVC shipping facility options

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	31	31.0	31.0	31.0
	2	35	35.0	35.0	66.0
	3	27	27.0	27.0	93.0
	4	5	5.0	5.0	98.0
	5	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

TABLE 5.9:

### Distribution of Column K

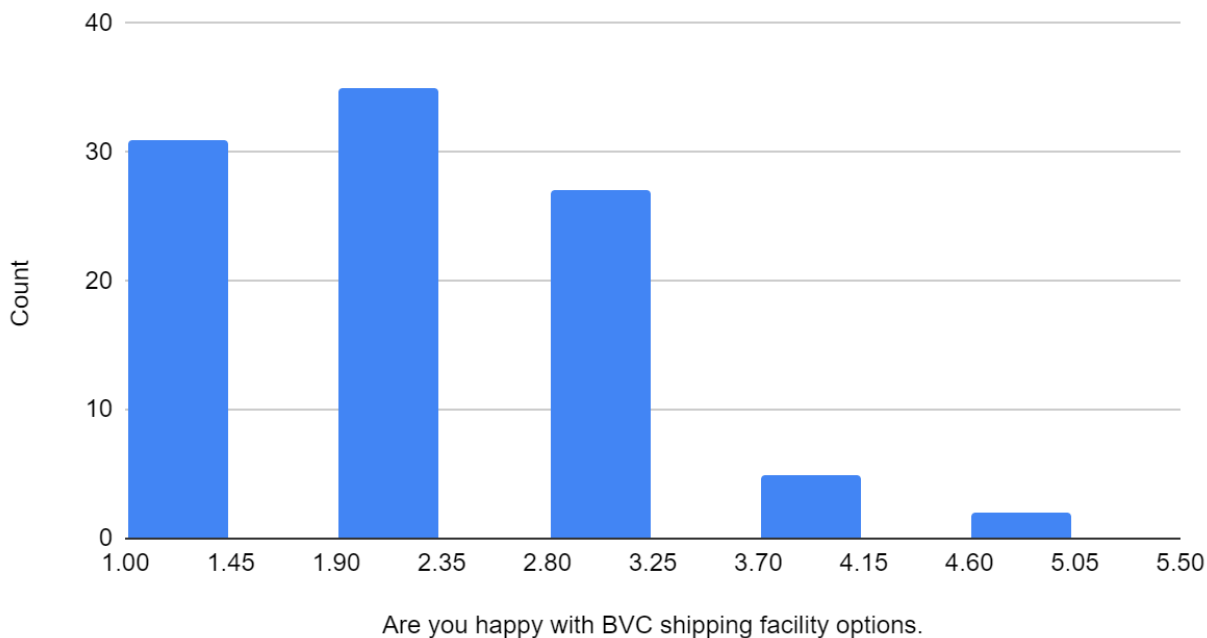


FIGURE 5.9:

From the above chart it was found that 31 respondent strongly agree ,35 respondent agree,27 respondent are neutral while 5 respondent disagree and 2 respondent strongly disagree .

5.10 Do you get your product safe at the time of delivery without any damage .

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	48	48.0	48.0	48.0
2	31	31.0	31.0	79.0
3	13	13.0	13.0	92.0
4	4	4.0	4.0	96.0
5	4	4.0	4.0	100.0
Total	100	100.0	100.0	

TABLE 5.10:

### Distribution of Column L

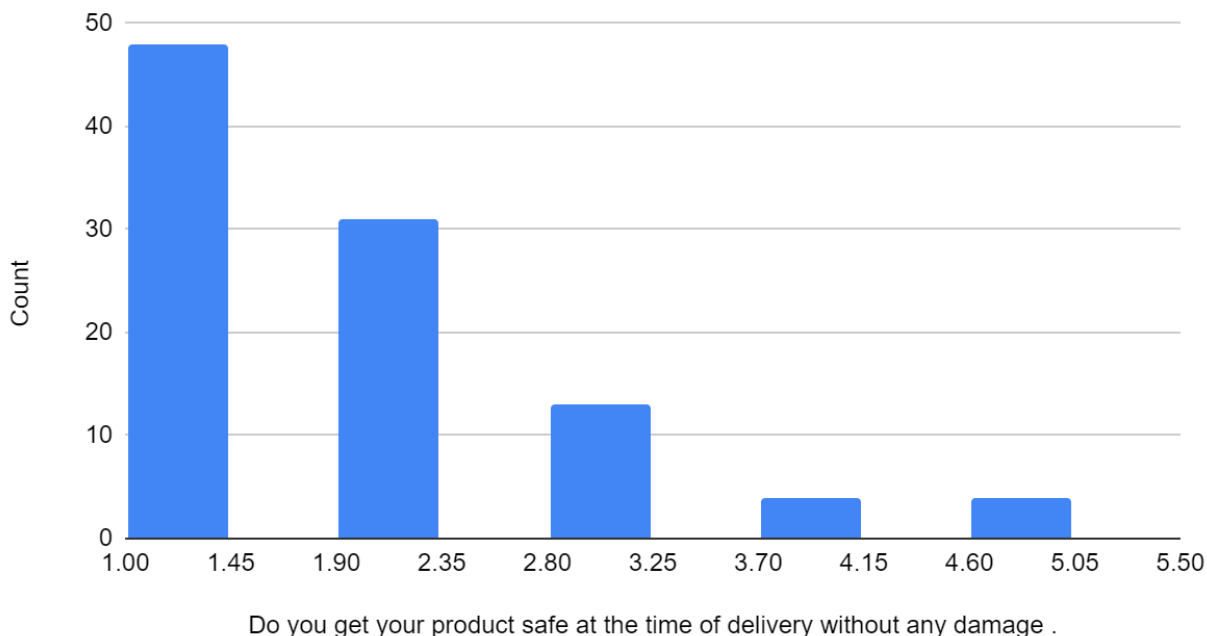


FIGURE 5.10:

From the above chart it was found that 48 respondent strongly agree ,31 respondent agree,13 respondent are neutral while 4 respondent disagree and 4 respondent strongly disagree .

#### 5.11 Was the BVC BRINKS website easy to navigate.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	22.0	22.7	22.7
	2	43	43.0	44.3	67.0
	3	24	24.0	24.7	91.8
	4	2	2.0	2.1	93.8
	5	6	6.0	6.2	100.0
	Total	97	97.0	100.0	
Missing System		3	3.0		
Total		100	100.0		

TABLE 5.11:

Distribution of Column M

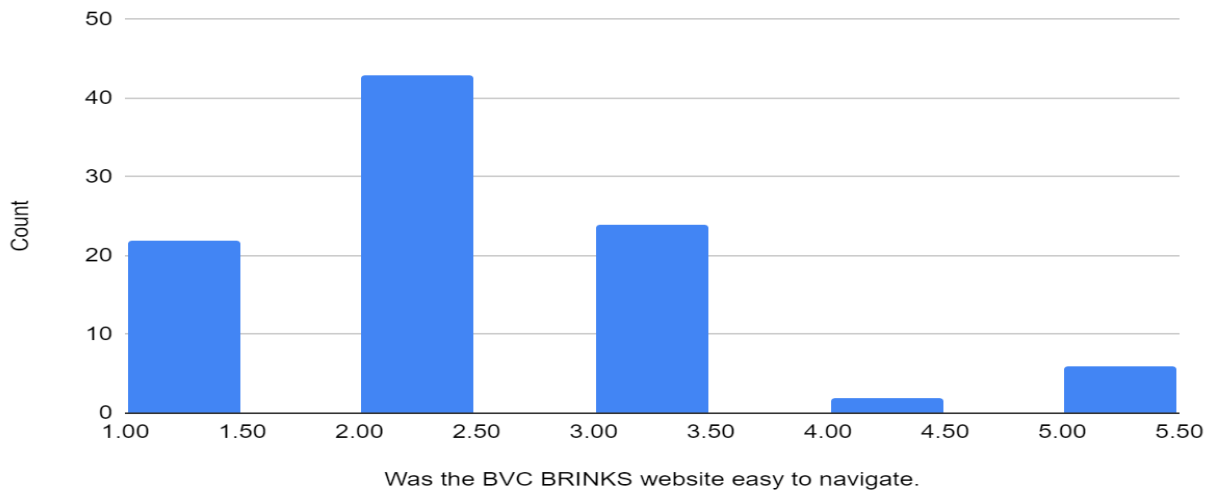


FIGURE 5.11:

From the above chart it was found that 22 respondent strongly agree ,43 respondent agree,24 respondent are neutral while 2 respondent disagree and 6 respondent strongly disagree .

5.12 Did the description of the service on BVC BRINKS website accurately represent what you received.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	27.0	27.6	27.6
	2	37	37.0	37.8	65.3
	3	25	25.0	25.5	90.8
	4	7	7.0	7.1	98.0
	5	2	2.0	2.0	100.0
	Total	98	98.0	100.0	
Missing	System	2	2.0		
Total		100	100.0		

TABLE 5.12:

### Distribution of Column N

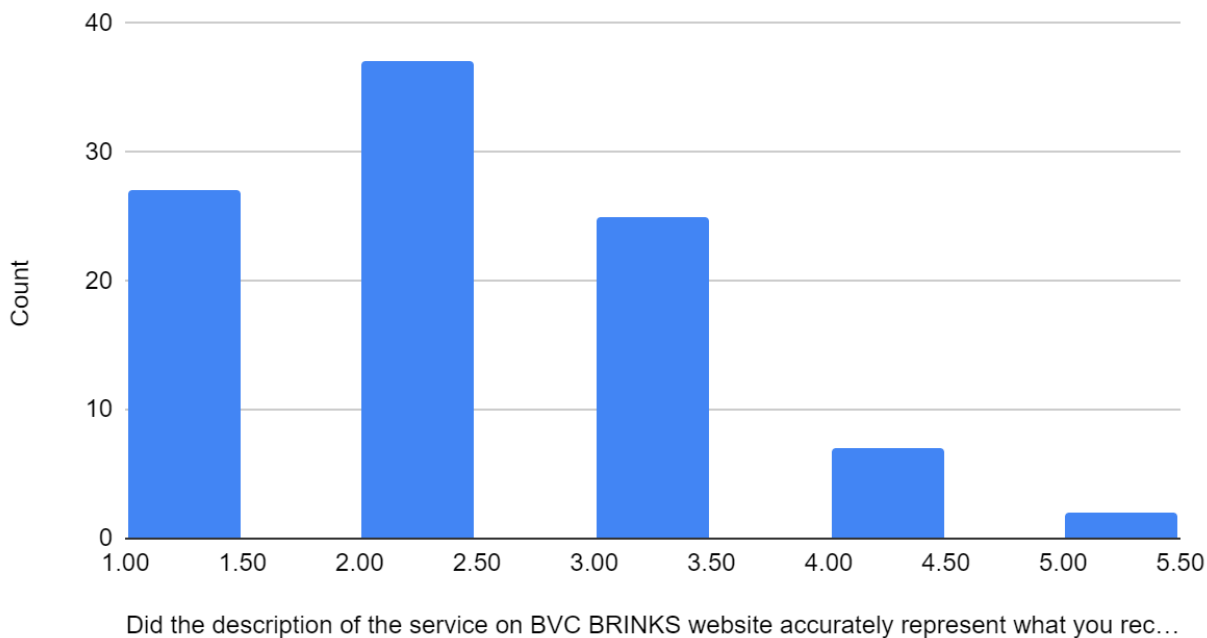


FIGURE 5.12:

From the above chart it was found that 27 respondent strongly agree ,37 respondent agree,25 respondent are neutral while 7 respondent disagree and 2 respondent strongly disagree .

### 5.13 Did you receive the correct product at the time of delivery.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	43	43.0	43.0	43.0
	2	33	33.0	33.0	76.0
	3	16	16.0	16.0	92.0
	4	2	2.0	2.0	94.0
	5	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

TABLE 5.13:

Distribution of Column O

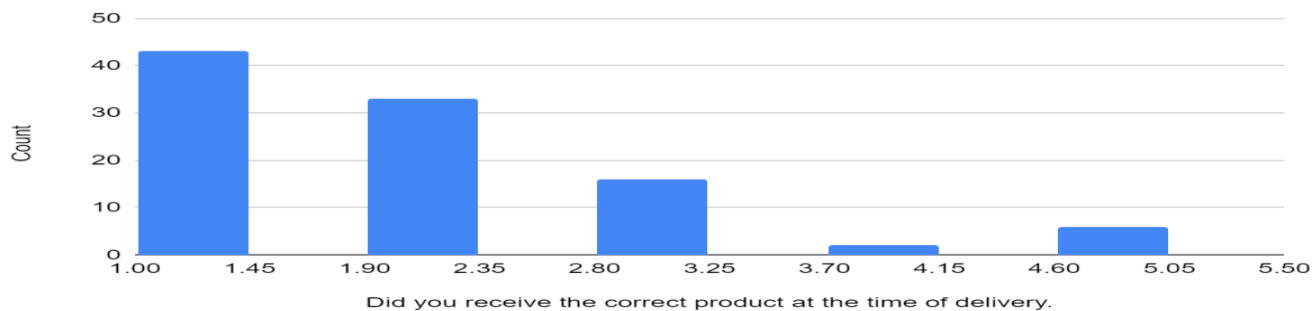


FIGURE 5.13:

From the above chart it was found that 43 respondent strongly agree ,33 respondent agree,16 respondent are neutral while 2 respondent disagree and 6 respondent strongly disagree .

5.14 Would you recommend BVC BRINKS services to a friend.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	26	26.0	26.0	26.0
2	41	41.0	41.0	67.0
3	23	23.0	23.0	90.0
4	4	4.0	4.0	94.0
5	6	6.0	6.0	100.0
Total	100	100.0	100.0	

TABLE 5.14:

### Distribution of Column P

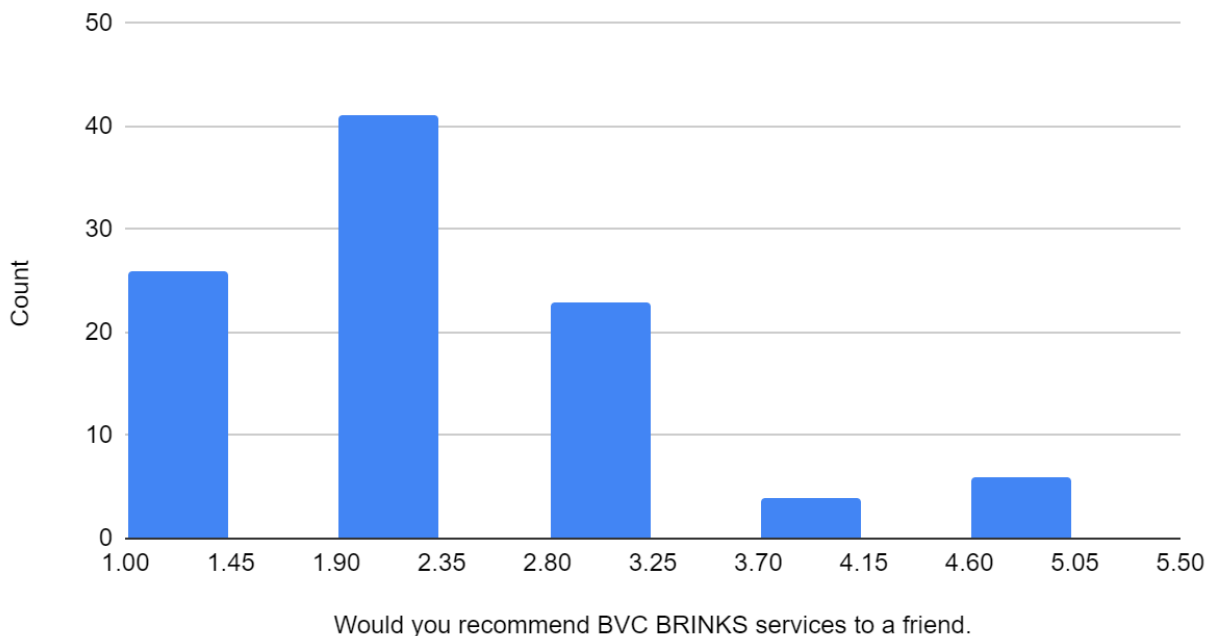


FIGURE 5.14:

From the above chart it was found that 26 respondent strongly agree ,41 respondent agree,23 respondent are neutral while 4 respondent disagree and 6 respondent strongly disagree .

### 5.15 Will you use BVC BRINKS services to meet your export & import needs in the future.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	22	22.0	22.0	22.0
2	52	52.0	52.0	74.0
3	18	18.0	18.0	92.0
4	5	5.0	5.0	97.0
5	3	3.0	3.0	100.0
Total	100	100.0	100.0	

TABLE 5.15:



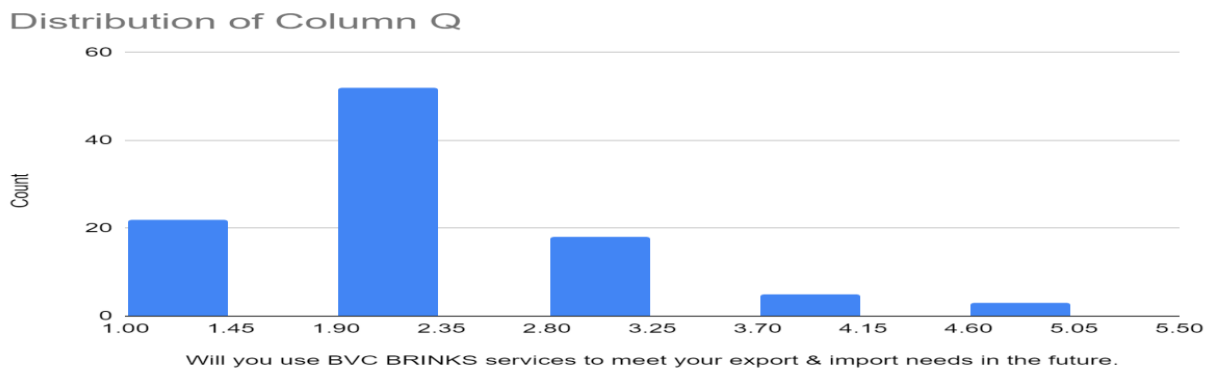


FIGURE 5.15:

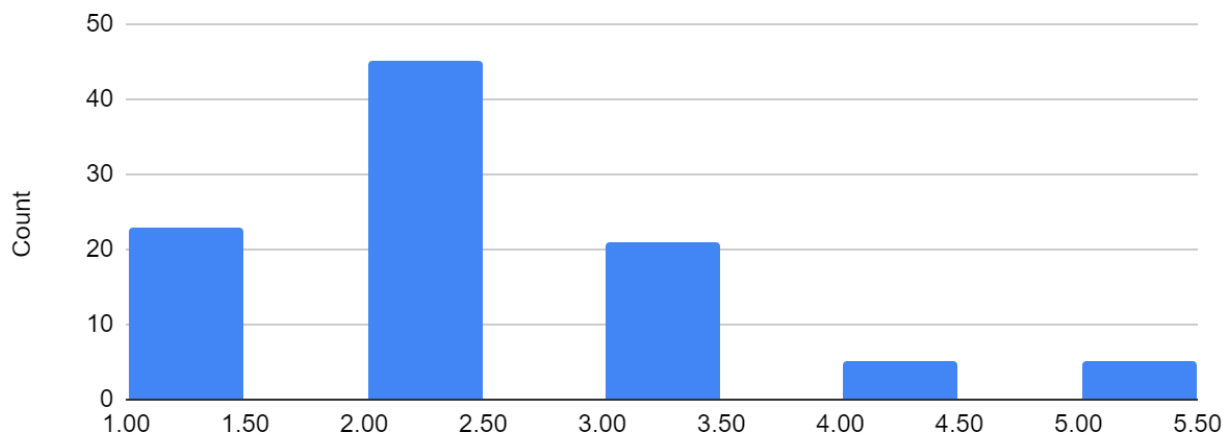
From the above chart it was found that 22 respondent strongly agree ,52 respondent agree,18 respondent are neutral while 5 respondent disagree and 3 respondent strongly disagree .

5.16 Would you consider that BVC BRINKS source to be a trusted and reliable source.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	23	23.0	23.2	23.2
	2	45	45.0	45.5	68.7
	3	21	21.0	21.2	89.9
	4	5	5.0	5.1	94.9
	5	5	5.0	5.1	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total		100	100.0		

TABLE 5.16:

### Distribution of Column R



Would you consider that BVC BRINKS source to be a trusted and reliable source.

FIGURE 5.16:

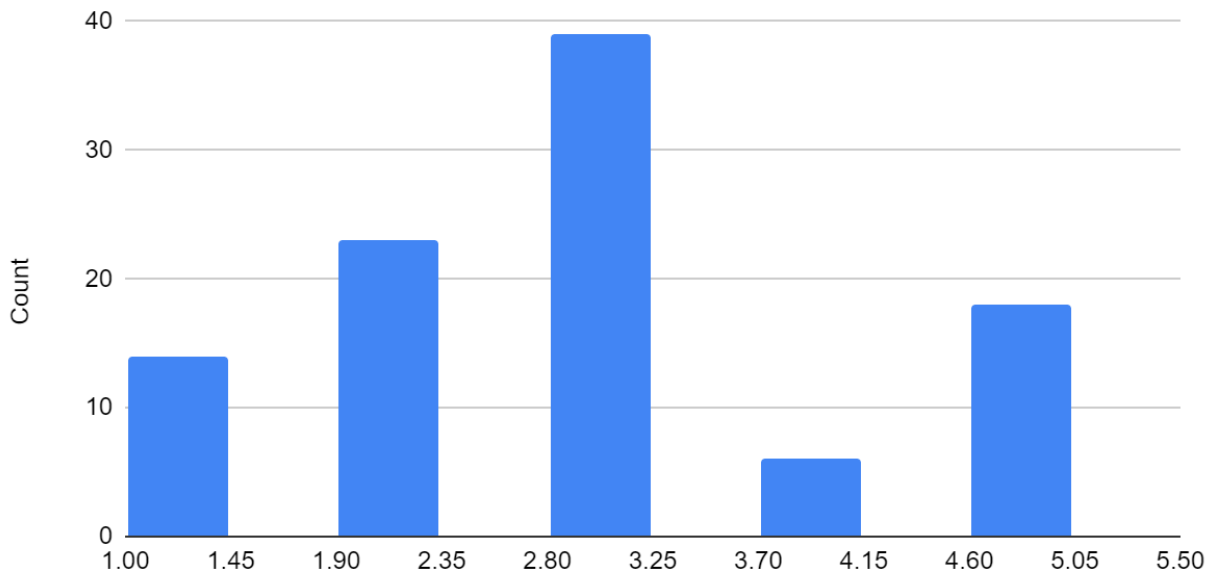
From the above chart it was found that 23 respondent strongly agree ,45 respondent agree,21 respondent are neutral while 5 respondent disagree and 5 respondent strongly disagree .

5.17 Would you consider speaking to one of our agents for 5 minutes about how we can improve our services.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	14.0	14.0	14.0
	2	23	23.0	23.0	37.0
	3	39	39.0	39.0	76.0
	4	6	6.0	6.0	82.0
	5	18	18.0	18.0	100.0
	Total	100	100.0	100.0	

TABLE 5.17:

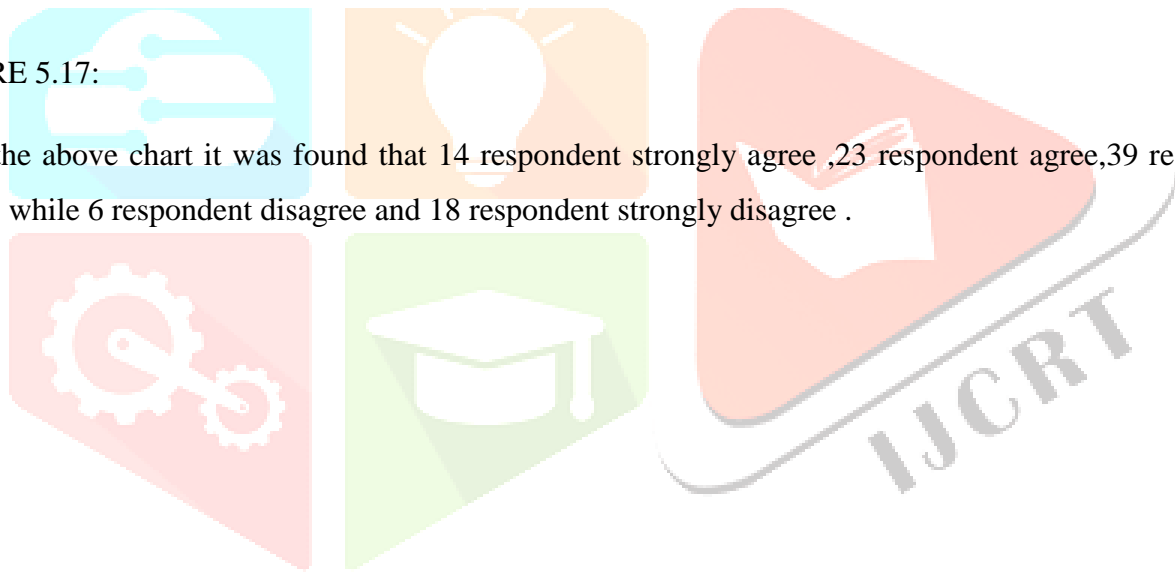
## Distribution of Column S



Would you consider speaking to one of our agents for 5 minutes about how we can improve...

FIGURE 5.17:

From the above chart it was found that 14 respondent strongly agree, 23 respondent agree, 39 respondent are neutral while 6 respondent disagree and 18 respondent strongly disagree.



## 6.FINDING

- Favorability of different Factors that satisfied them after using BVC Brinks services does not differ significantly with respect to types of business.

- Favorability of after service, product among the respondents.

## 7.CONCLUSION

Brinks Global assures safe and secure delivery of gems and jewellery products in countries beyond India. Having foreseen the demand for this service in the Indian market, the joint venture is a market leader controlling over 45% of India's exports and imports. We provide door-to-door service for our international shipments; we are a proud shipment and logistics partner to world-renowned gems and jewellery trade shows hosted in Bahrain, Bangkok, Basel, Dubai, Hong Kong, IJL (UK), IJT (Japan), Las Vegas, Vicenza and many more.

A vaulting facility ensures a customer, absolute safety, and peace of mind. The vaulting facility has armed guards and 24x7 surveillance. This value-added service helps customers to plan their business and promotional activity without the risk of holding precious valuable cargo in hotels, convention centres and exhibitions during the night.

BVC Brinks Diamond and Jewellery Services LLP operates a specialized exhibition cell for managing International and Indian trade shows. We are known for professional orchestrated documentation and secured logistics for jewellery trade shows. This service encompasses necessary permissions, location transportation, insurance coverage and travel management. The complete process is managed with the highest secrecy, hence ensuring the delivery of high-value consignments safely.

## 8.RECOMMENDATION

- In this study, majority of the respondents are dominated by Male group and very few Female having own business. To attract female consumer, the service need to be modified.
- Trust issue needed to be increase among the customer.
- Agent bonding with customer needed to be increase.

## 9.REFERENCES

[https://www.linkedin.com/authwall?trk=gf&trkInfo=AQGI8yl\\_N\\_up2gAAAXkNqkBgP5VbSfcb\\_iYcf2GDCXhoJ\\_Kgqn74UAmLiuLR5ZJdXjTECaM5iSz4GdHCC9weZOqTCQkgI9E2C2AtieuOMadLE4iRwf7AwiiUbMOOoQCobAaq5AA=&originalReferer=https://www.google.com/&sessionRedirect=https%3A%2F%2Fin.linkedin.com%2Ffin%2Ffrashim-mehta-8932547](https://www.linkedin.com/authwall?trk=gf&trkInfo=AQGI8yl_N_up2gAAAXkNqkBgP5VbSfcb_iYcf2GDCXhoJ_Kgqn74UAmLiuLR5ZJdXjTECaM5iSz4GdHCC9weZOqTCQkgI9E2C2AtieuOMadLE4iRwf7AwiiUbMOOoQCobAaq5AA=&originalReferer=https://www.google.com/&sessionRedirect=https%3A%2F%2Fin.linkedin.com%2Ffin%2Ffrashim-mehta-8932547)

<https://www.diamondworld.net/contentview.aspx?page=0&item=24797>

<https://en.wikipedia.org/wiki/Brink%27s>

[https://afterdispatch.com/courier/Brinks\\_Global\\_tracking.php](https://afterdispatch.com/courier/Brinks_Global_tracking.php)

[https://www.brinksglobal.com/services/brinks\\_online.aspx](https://www.brinksglobal.com/services/brinks_online.aspx)

<http://bvcbrinks.com/>



## 10.APPENDIX

Name:

Business ownership type: proprietorship [ ]          partnership [ ]

Type of business: manufacturer [ ]          wholesaler [ ]          retailer [ ]

QUESTION	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
Are you satisfied with how BVC agent handled your inquiry					
Did BVC agent resolve your issue competently					
Were you able to find the support/information you needed easily in bvc brinks portals					
Did the bvc brinks website load efficiently					
Were you able to locate products/services/information without assistance on bvc brinks portal					
Do you find that the features are easy to use on bvc brinks portal					
Are you happy with your shipping facility options					

Do you get your product safe at the time of delivery without any damage					
Was the BVC BRINKS website easy to navigate					
Did the description of the service on bvc brinks website accurately represent what you received					
Did you receive the correct product at the time of delivery					
Would you recommend bvc brinks services to a friend					
Will you use bvc brinks services to meet your export & import needs in the future					
Would you consider that bvc brinks source to be a trusted and reliable source					
Would you consider speaking to one of our agents for 5minutes about how we can improve our services					